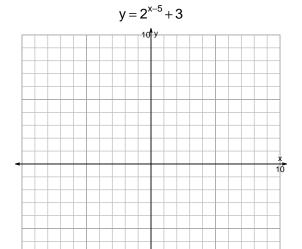
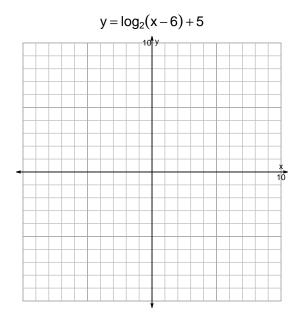
## s18quiz: EXP LOG (Example v10)

1. Graph  $y=2^{x-5}+3$  and  $y=\log_2(x-6)+5$  on the grids below. Also, draw any asymptotes with dotted lines.

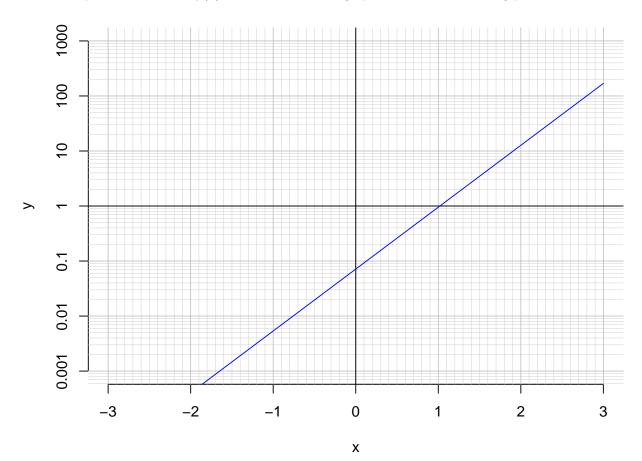




2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-23 = \left(\frac{-7}{5}\right) \cdot 2^{3t/4}$$

3. An exponential function  $f(x) = 0.0714 \cdot e^{2.59x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.6).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.009)$ .